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DORITY & MANNING, P.A.			JOHNSON, EDWARD M	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/686,938

Applicant(s)

DO ET AL.

Examiner

Edward M. Johnson

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24-39 and 54-73 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 24-39 and 54-73 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 24-31, 54-59, and 71-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yim '356 in view of Matsui et al. US 5,380,510.

Regarding claim 24, Yim '356 discloses a method of making a deodorant comprising silica carrier, transition metal, and a catalytic metal on the carrier (abstract) wherein the catalytic metal is covalently bonded (see column 1, lines 52-61 and claim 1).

Yim fails to disclose a pH of 9-10.

Matsui '510 discloses a pH of 9 (see Table, column 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the pH of Matsui in the silica making process of Yim because Matsui discloses the pH as applied to silica production, to control gelation time,

Art Unit: 1754

which advantageously controls pore volume and specific surface area (see column 1, lines 29-31).

Regarding claims 25, 54-57, 71-73, 64-68, Matsui discloses a particle size of 8-50 nm, surface area of 375 square meters per gram, and pore volume of 0.2-1.2 ml/g (see column 2).

Regarding claims 28-30, 58-59, 62-63, Matsui '510 discloses a pH of 9 (see Table, column 2), and it would have been obvious to one of ordinary skill to adjust the pH by adding any basic compound such as alkali carbonate or hydroxide, or urea pyrolysis, and find an optimum metal/silica ratio, through routine experimentation.

Regarding claims 26-27, Yim '356 discloses Cr, Mn, Ti, V, Zn, Zr, as transition metals and Fe, Co, and Ni, as catalytic metals.

Regarding claim 31, Yim '356 discloses ammonia, amine, methyl-mercaptan, carbon disulfide, and the like (see column 3, lines 16-18).

3. Claims 32 and 34-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yim '356 in view of Yu et al. 6,111,010.

Regarding claim 32, Yim '356 discloses a method of making a deodorant comprising silica carrier, transition metal, and a catalytic metal on the carrier (abstract) wherein the catalytic

Art Unit: 1754

metal is covalently bonded (see column 1, lines 52-61 and claim 1).

Yim fails to disclose an aminofunctional alkoxysilane.

Yu discloses an aminofunctional alkoxysilane (abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the aminofunctional alkoxysilane of Yu in the silica production method of Yim because Yu discloses the alkoxysilane in a process for making compositions comprising colloidal silica (see column 8, lines 8-23).

Regarding claims 35-38, Yu discloses an aminofunctional alkoxysilane (abstract).

Regarding claim 34, Yim '356 discloses Cr, Mn, Ti, V, Zn, Zr, as transition metals and Fe, Co, and Ni, as catalytic metals.

Regarding claim 39, Yim '356 discloses ammonia, amine, methyl-mercaptan, carbon disulfide, and the like (see column 3, lines 16-18).

4. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yim '356 in view of Yu '010 as applied to claim 32 above, and further in view of Matsui '510.

Regarding claim 33, Yim fails to disclose a less than 100 nm.

Art Unit: 1754

Matsui '510 discloses a particle size of 8-50 nm (column 1, lines 65-66).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the size of Matsui in the silica making process of Yim because Matsui discloses the size as applied to silica production, to control gelation time, which advantageously controls pore volume and specific surface area (see column 1, lines 29-31).

5. Claims 60-61 and 69-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yim '356 as applied to claim 24 above, and further in view of Hansen et al. US 5,614,570.

Regarding claims 22-23, Yim fails to disclose a nonwoven substrate.

Hansen discloses binding to a fiber (abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the fiber substrate of Hansen with the covalently bonded silica making process of Yim because Hansen discloses the fiber substrate in a process comprising forming a coordinate covalent bond with a silica particle and an odor absorber (see abstract and column 12, lines 60-63).

Response to Arguments

6. Applicant's arguments filed 4/16/07 have been fully considered but they are not persuasive.

It is argued that even assuming *arguendo* that... claim 24. This is not persuasive because Applicant appears to admit that both a mixture and the claimed pH are taught. Thus, assuming these teachings are combined, as Applicant stipulates, *arguendo*, the claim is met.

It is argued that this distinction... present specification. This is not persuasive because Applicant does not claim precipitation on the surface, or a lack thereof. It is noted that the features upon which applicant relies (i.e., precipitation on the surface, or a lack thereof) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

It is argued that Applicants initially note... silica particles. This is not persuasive because Applicant appears to admit that particles are disclosed in both references. The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves

Art Unit: 1754

or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the aminofunctional alkoxysilane of Yu in the silica production method of Yim because Yu discloses the alkoxysilane in a process for making compositions comprising colloidal silica (see column 8, lines 8-23).

It is argued that even if combined... claim 32. This is not persuasive because appears to merely argue that certain features disclosed in one reference are missing from the other, which is the basis for the combination. Yu discloses an aminofunctional alkoxysilane (abstract) and Yim discloses a method of making a deodorant comprising silica carrier, transition metal, and a catalytic metal on the carrier (abstract). One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

It is argued that this distinction... present specification. This is not persuasive because Applicant does not claim the specified coordinate complex. It is noted that the features upon

Art Unit: 1754

which applicant relies (i.e., the specified coordinate complex) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 1754

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward M. Johnson whose telephone number is 571-272-1352. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley S. Silverman can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199

Application/Control Number: 10/686,938

Page 10

Art Unit: 1754

(IN USA OR CANADA) or 571-272-1000.



Edward M. Johnson

Primary Examiner

Art Unit 1754

EMJ